

L Number	Hits	Search Text	DB	Time stamp
1	101	monolith\$ and (iol or intraocular)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 09:55
2	13	monolith\$ and (iol or intraocular) and haptic	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 10:08
3	5	(monolith\$ and (iol or intraocular) and haptic) and (coating or coated)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 10:11
4	0	polyimide with (coating or coated) and (monolith\$ and (iol or intraocular))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 10:12
5	0	polyimide same (coating or coated) and (monolith\$ and (iol or intraocular))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 10:12
6	30	polyimide same (coating or coated) and (iol or intraocular)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 10:13
7	13	polyimide with (coating or coated) and (iol or intraocular)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 10:18
8	13	(polyimide with (coating or coated) and (iol or intraocular)) and polyimide with (coating or coated)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 10:19

	Document	1	2	3	4	5	6	7	8	9	10	11	12	13
1	US 2002016	US-20021107	19	Bif										
2	US 6533768	USP:20030318	14	Dev										
3	US 6464889	USP:20021015	20	Sur										
4	US 6234951	USP:20010522	17	Int										
5	US 6156576	USP:20001205	19	Fas										
6	US 6099454	USP:20000808	18	Per										
7	US 6033582	USP:20000307	20	Sur										
8	US 5951458	USP:19990914	24	Loc										
9	US 5855546	USP:19990105	23	Per										
10	US 5637772	USP:19970610	20	Flu										
11	US 5260352	USP:19931109	6	Ocu										
12	US 5049156	USP:19910917	14	Int										
13	US 5019210	USP:19910528	7	Met										

US-PAT-NO: 6033582

DOCUMENT-IDENTIFIER: US 6033582 A

TITLE: Surface modification of medical implants

----- KWIC -----

Brief Summary Text - BSTX (14):

Many plasma treatment techniques, for polymers in particular, use cold plasmas to activate the surface by plasma-induced polymerization and/or RF plasma treatment to break surface polymer bonds. This action generates ions and free radicals, setting up favorable conditions for subsequent RF plasma-induced polymerization and grafting of monomers to the substrate surface as described

in U.S. Pat. No. 5,080,924; incorporated herein by reference. In another application, similar covalent bonding of polymeric biocompatible materials onto

intraocular lenses via RF plasma grafting was successfully achieved, creating a microscopically smooth surface as described in U.S. Pat. No. 5,260,093; herein incorporated in reference.

Detailed Description Text - DETX (62):

As previously stated, the inventive method enhances medical implant surfaces by improving the adhesion characteristics of the substrate, which in turn provides for better coating uniformity and thickness of biocompatible polymeric materials because the invention roughens and changes the micro-morphological configurations of the surface. Some of the immobilized polymeric coatings that can be used include: polyolefins, polyamides, polyimides, polyethers, polyesters, polystyrenes, polyvinyl chlorides, polypropylenes, polyisoprenes, polytetrafluoroethylenes, polyurethanes, polycarbonates, polyalkylimines (in combination with cross-linking agents: glutaraldehyde, glyoxal, malonaldehyde, succinaldehyde, adipaldehyde, or dialdehyde starch). U.S. Pat. No. 5,415,938 and U.S. Pat. No. 5,415,938, herein incorporated by reference, identify some of the existing art used to polymer coat medical implant devices.

	Document I	R	Source	Page
1	US 4749530	USP	19880607	5
2	US 4932971	USP	19900613	3
3	US 4963148	USP	19901016	13
4	US 5074942	USP	19911224	7
5	US 5074942	DER	19911224	1
6	US 5507806	DER	19951123	1
7	US 5507806	USP	19960416	24
8	US 5683592	USP	19971104	10
9	US 5762836	USP	19980609	13
10	US 5769889	USP	19980623	7
11	US 6201036	USP	20010313	21
12	US 2001000	US	20010705	24
13	US 6443893	USP	20020903	4

diopter value characteristics assigned to a given clip-on optic of assembly 11, will depend upon the existing optical characteristics of the implanted intraocular lens and the nature of the modification thereof intended to be produced by combining the add-on clip assembly therewith according to the invention. These factors are well known to the attending ophthalmologist.

Detailed Description Text - DETX (44):

In particular, it will be noted that by providing lens body 12 of glass, which normally has a higher index of refraction than plastic, it may be made thinner than if provided of plastic such as PMMA, in which case a rigid connection will be required between clip members 13 and glass lens body 12 to facilitate the clip-on action, whereas by providing lens body 12 of plastic such as PMMA, it may be formed with clip members 13 of PMMA as well, in which case an integral connection there-between may be conveniently utilized for such purposes, thereby providing a monolithic construction.

Claims Text - CLTX (1):

1. A clip-on optic assembly, capable of being clipped in situ onto a previously implanted intraocular lens to change the optical characteristics thereof without having to remove the implanted lens from the eye, which comprises

Claims Text - CLTX (16):

14. Combination of an optic assembly of claim 1 and an intraocular lens adapted to be implanted into the interior of an eye, said optic assembly adapted to be clipped in situ onto the intraocular lens after previously implanting said intraocular lens.

Claims Text - CLTX (22):

inserting the optic assembly through an incision into the interior of an eye containing said intraocular lens previously implanted into the interior of the eye, and

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1	US 2002016	US-	20021107	19
2	US 6533768	USP	20030318	14
3	US 6464889	USP	20021015	20
4	US 6234951	USP	20010522	17
5	US 6156576	USP	20001205	19
6	US 6099454	USP	20000808	18
7	US 6033582	USP	20000307	10
8	US 5951458	USP	19990914	24
9	US 5855546	USP	19990105	23
10	US 5637772	USP	19970610	20
11	US 5260352	USP	19931109	6
12	US 5049156	USP	19910917	14
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EAST Browser LT: (18) COLORED WITH... [US 4744647 A] Tag: S [Doc: 13/18 (SORTED)] Format: KWIC									
File Edit View Tools Window Help									
	Document ID	Rs	Issue	Da	Pat	Ti			
1	US 6221106 B1	U	20010424	11	Diaphr	US-PAT-NO: 4744647			
2	US 5951565 A	U	19990914	12	Cornea	DOCUMENT-IDENTIFIER: US 4744647 A			
3	US 5919227 A	U	19990706	3	Moving	TITLE: Semi-opaque corneal contact lens or intraocular lens and method of formation			
4	US 5735895 A	U	19980407	10	Artifi	----- KWIC -----			
5	US 5674284 A	U	19971007	9	Intrao	Brief Summary Text - BSTX (4):			
6	US 5074942 A	U	19911224	7	Method	A number of techniques have been suggested to impart opacity to a limited region of a contact lens. One suggestion has been made to add light reflecting particles such as finely divided oyster shell or mica in a matrix of			
7	US 4921496 A	U	19900501	23	Radial	transparent colored lens material. This is suggested for use in a cosmetic soft contact lens. There are several disadvantages to this approach. One is			
8	US 4906246 A	U	19900306	14	Cylind	the difficulty in adding the particles to the lens material in a consistent manner and in controlling the hydration and, therefore, power predictability and physical construction of the manufactured lens. Also, the lens material tends to separate from the particles at their interface. Furthermore, such technique must be accomplished before the lens is finished adding to the expense and limiting the technique's versatility. Another problem with this technique is that particles at the lens surface can cause substantial irritation to the eye.			
9	US 4906245 A	U	19900306	18	Multip	Current US Cross Reference Classification - CCXR (7):			
10	US 4798609 A	U	19890117	22	Radial	<u>62376711</u>			
11	US 4795462 A	U	19890103	14	Cylind				
12	US 4778462 A	U	19881018	18	Multip				
13	US 4744647 A	U	19880517	5	Semi-o				
14	US 4725276 A	U	19880216	9	Intrao				
15	US 4547915 A	U	19851022	9	Intrao				
16	US 4547914 A	U	19851022	13	Intrao				
17	US 4485499 A	U	19841204	11	Intrao				
18	US 4332039 A	U	19820601	8	Ocular				